

**CITY OF BROOKLYN, OHIO**  
**ELECTRICAL PANEL UPGRADE REQUIREMENTS**  
**INCLUDE, BUT ARE NOT LIMITED TO:**

1. Metal cabinets, raceways, and meter base shall be bonded in accordance with **NEC 250.92.**
2. Bonding bushings shall be installed where concentric or eccentric knockouts impair the electrical connection to ground. **NEC 250.92.**
3. Standard locknuts and bushings shall not be the sole means for required bonding. **NEC 250.92.**
4. Grounding electrode conductor shall be connected to the metal underground water pipe within five (5) feet of point of entrance to the building. **NEC 250.52 (A)1.**
5. Supplemental ground rod(s) are required in addition to the metal underground water pipe. **NEC 250.53 (D)(2)**
6. Ground rods shall comply with **NEC 250.52(A)5(b)**
7. Ground rods shall be installed in accordance with **NEC 250.53(G)**
8. Where a single ground rod (electrode) does not have a resistance to ground of 25 ohms or less, it shall be augmented by one additional ground rod. Multiple ground rods shall be not less than six (6) feet apart. **NEC 250.53(B), NEC 250.56**
9. Grounding electrode conductor shall be installed and protected in accordance with **NEC 250.64(B)**
10. Metal water piping shall be bonded around water meters with jumpers sized in accordance with table 250.66 **NEC 250.104(A)1**
11. Electrical equipment shall be installed in a neat and workmanlike manner. **NEC 110.12**
12. Electrical equipment shall be firmly secured to the surface upon which it is mounted, in an approved manner. **NEC 110.13**
13. A minimum of three (3) feet deep, thirty (30) inch wide, clear, unobstructed working space must be maintained in front of electrical panels, air conditioner disconnects, and similar electrical equipment. **NEC 110.26(A)**
14. It is your responsibility to provide for, and be present for all required inspections. Re-inspection fee(s) may be charged if work is incomplete, and/or incorrect. **Ordinance 1994-93 (Amended)**

**Please contact Electrical Inspector Bill Marzola at (216) 661-0278**  
**Monday through Friday from 8:30 am to 4:30 pm to arrange for inspections.**